
A Robustness Test Protocol for Applied QCA: Theory and R Software Application

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- *Supplemental Material* -

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Calibration Thresholds for Initial Solution

Table 1. Calibration Thresholds

Set	1-anchor	0.5-anchor	0-anchor
HL	80	75.2	68
HE	4.86	4.09	3.05
GG	0.86	-0.21	-0.69
AH	0.9	-0.08	-0.7
HI	33	21.25	15
HW	28,500	10,500	3000

Initial Solution and Test Solutions

Table 2. Solutions for Outcome 'High Life Expectancy'

Conditions	IS		TS1		TS2		TS3	
	ISa	ISb	TS1a	TS1b	TS2a	TS2b	TS3a	TS3b
HE		●	●				●	●
GG	●	◐		◐	●		●	
AH	●				●	●	●	●
HI		●				●		●
HW		●		●				
Cons.Suf.	0.882	0.871	0.801	0.691	0.882	0.781	0.911	0.908
PRI	0.842	0.871	0.724	0.205	0.842	0.558	0.879	0.774
Raw Cov.	0.742	0.209	0.885	0.275	0.742	0.266	0.731	0.255
Unique Cov.	0.613	0.080	0.635	0.025	0.509	0.033	0.502	0.027
Cons. Suf.	0.876		0.766		0.850		0.907	
PRI	0.822		0.679		0.798		0.871	
Cov. Suf.	0.822		0.910		0.775		0.758	

● - Condition Present; ◐ - Condition Absent; blank - Condition Irrelevant

Obtaining Boolean expressions for the Test Set and the Robust Core

```
# Obtain Boolean expression for minTS:

intersection(TS1, TS2, TS3)

E1: (HE + ~GG*HW) (GG*AH + AH*HI) (HE*GG*AH + HE*AH*HI)
I1: HE*GG*AH + HE*AH*HI

# Obtain Boolean expression for maxTS:
simplify("(GG*AH + HE*~GG*HI*HW)+(HE + ~GG*HW) +
(GG*AH + AH*HI)+(HE*GG*AH + HE*AH*HI)", snames = conds)

S1: HE + ~GG*HW + GG*AH + AH*HI
```